CHAPTER III.

OOLITIC SERIES;

Including all the Strata between the Iron Sand and Red Marle.

Section I. General view.*

(a) Of these formations in England. We now enter upon the second of the three great subdivisions of the formations classed by us under the Supermedial Order; a series on many accounts highly interesting and important, since it is the great repository of the best architectural materials which the Island produces,—and since the history and relations of its several members, although they occur extensively on the continent, have in this country alone been fully developed and illustrated.

It would here be unjust to suppress honorable mention of the name of Mr. Smith, well known from his Geological Map and Sections. It is his great and real merit to have been the first person who clearly ascertained and established the true order, position, and course of these formations; and superseded the vague and general denomination of secondary or shell limestones, by introducing the determination of a full, precise, and particular knowledge.

The system of formations occupying the interval of which we have above determined the limits, may be generally described as consisting of a series of colitic limestones, of calcareosiliceous sands and sandstones, and of argillaceous and argillocalcareous beds, alternating together, and generally repeated in the same order; i.e. a formation consisting of many beds of oolitic limestone, resting upon one of calcareo-siliceous sand,

and that again upon an argillo-calcareous formation.

Neglecting for the present minor subdivisions, we may with sufficient accuracy represent three of these systems as comprehending all the beds which intervene between the iron sand, and the saliferous or new red sandstone. Each of these systems' is based on an argillo-calcareous formation of great thickness,